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A47F 5/00, A47B 57/38

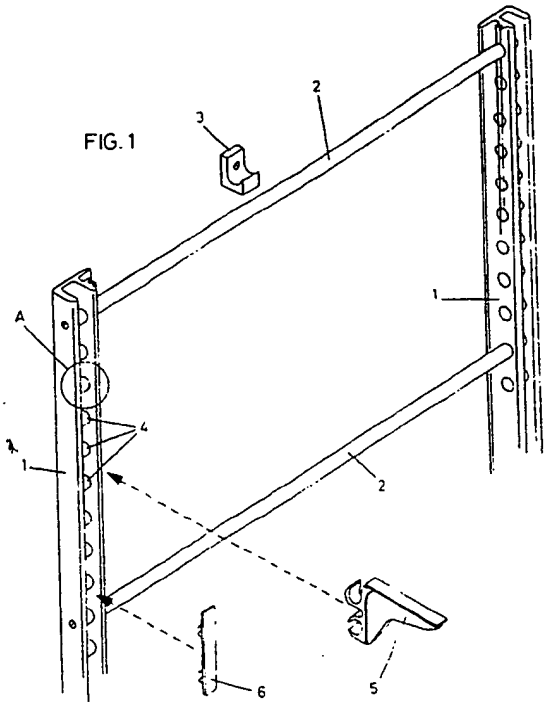
(52) UK CL (Edition J)
A4B B1A B1C1 B1D B1G B1X B3B B5A4X B5A7C B5A7X B5A7Y B7A1 B7CX B7C1 B7C2A B7C3 B7E3
U1S S1700 S1727

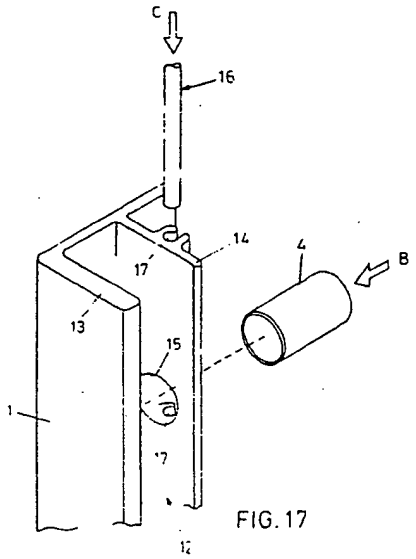
(56) Documents cited
GB 2064305 A **GB 1215983 A** **GB 1076906 A**
GB 1052719 A **GB 0992153 A** **GB 0608480 A**

(58) Field of search
UK CL (Edition J) **A4B**
INT CL⁴ **A47B 57/00 57/04 57/06 57/08 57/10 57/12 57/14 57/16 57/18 57/20 57/22 57/26 57/30 57/32 57/34 57/36 57/38 57/40 57/42 57/44 57/46 57/48 57/50 57/52 57/54 57/56 57/58 96/00 96/02 96/04 96/06 96/07 96/14 96/16 96/18 96/20**

(54) Shop fitting structure and system

(57) A shop fitting structure and system is provided, in which a shelf and merchandise support structure is contained within vertical channel members 1. Each channel member 1 mounts, between opposite sides 13 and 14 thereof, a vertical array of identical equally spaced transverse load-bearing elements 4. The load-bearing elements 4 are preferably formed from short lengths of tubular steel stock, and retained in position spanning transverse bores 15 through the walls 13 and 14 by means of a vertical dowel rod 16. Support brackets 5 for shelving or merchandise clip onto the load bearing elements 4. Each bracket has a pair of integrally formed mounting portions which clip resiliently around a corresponding pair of the load-bearing elements 4. Preferably the upper mounting portion is upwardly opening and the lower mounting portion is rearwardly opening. The spaces between adjacent vertical channel members 1 can be filled by simple clip on panels which are non-load-bearing. The system can be constructed as a wall display system or as a free-standing floor display system.





At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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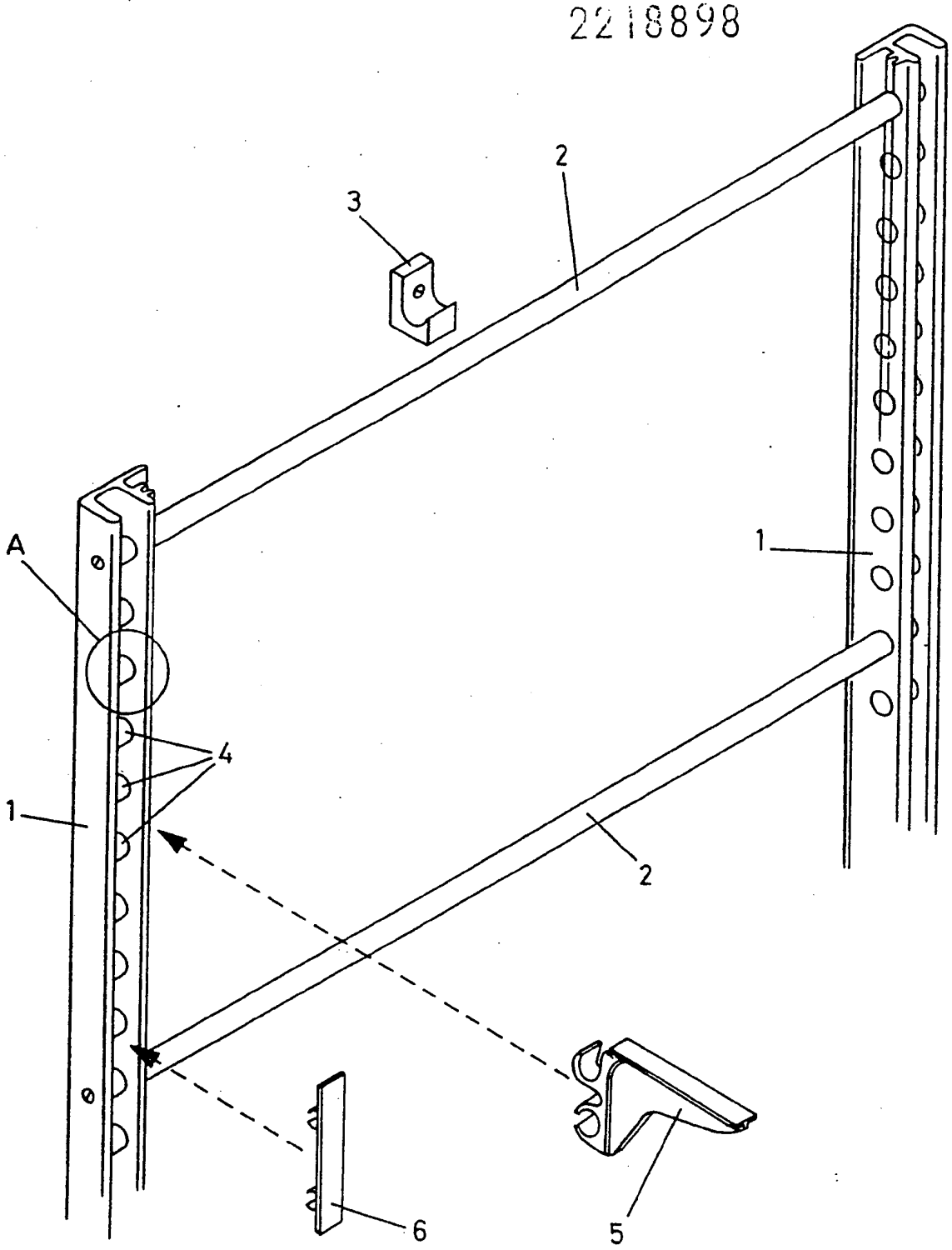

FIG. 1

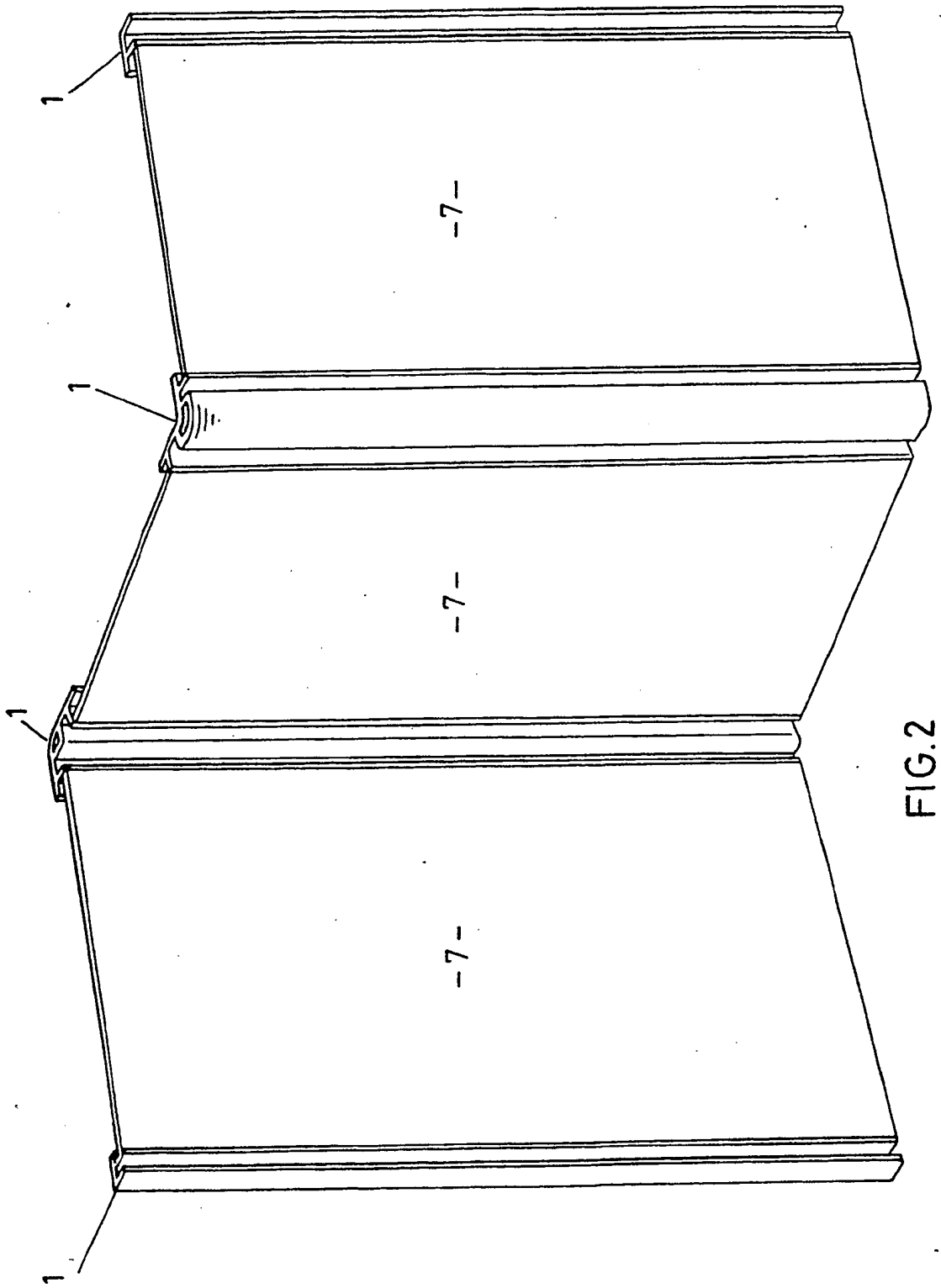

FIG.2

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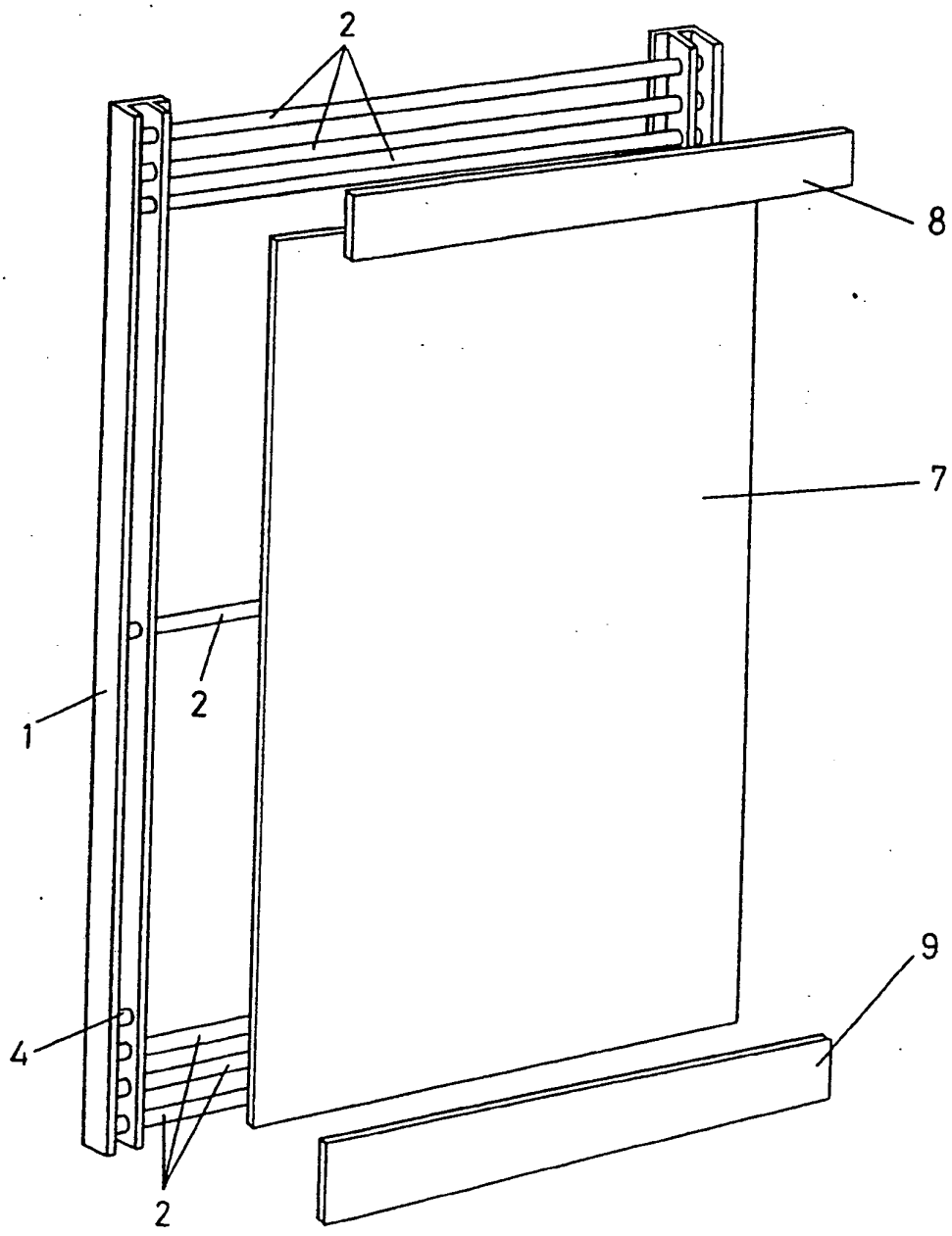

FIG. 3

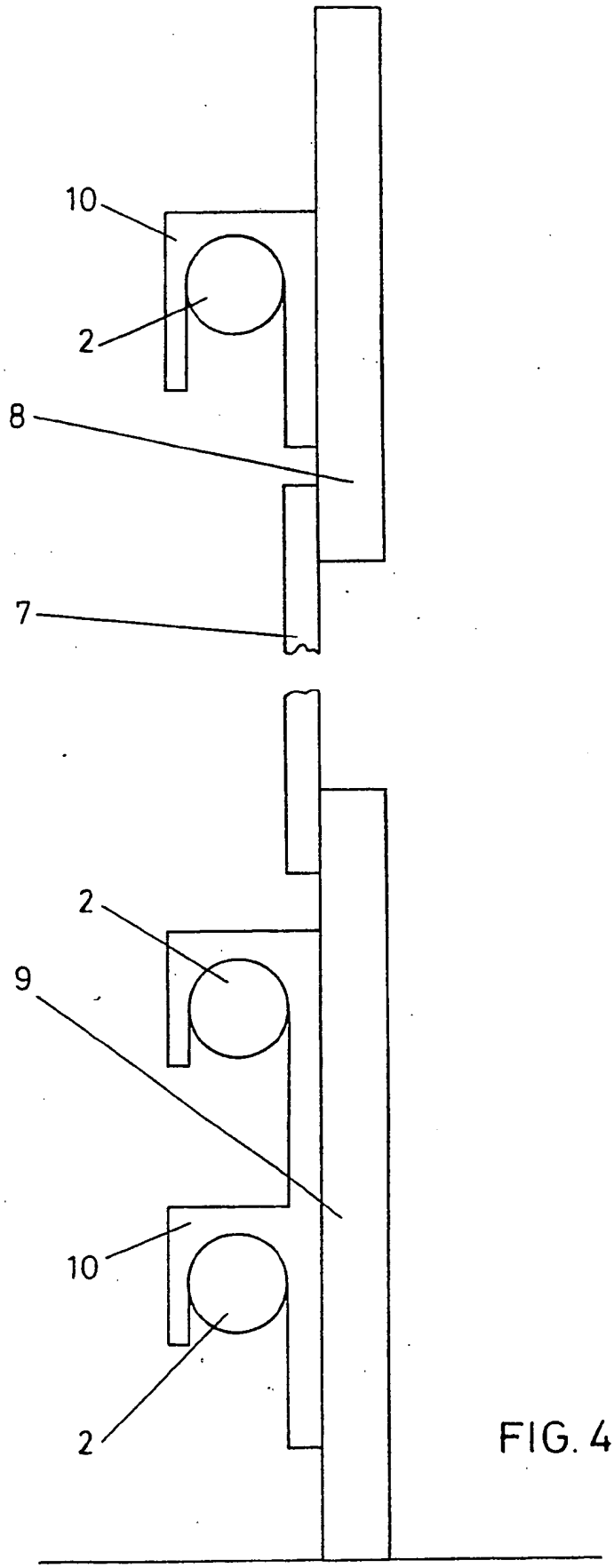

FIG. 4

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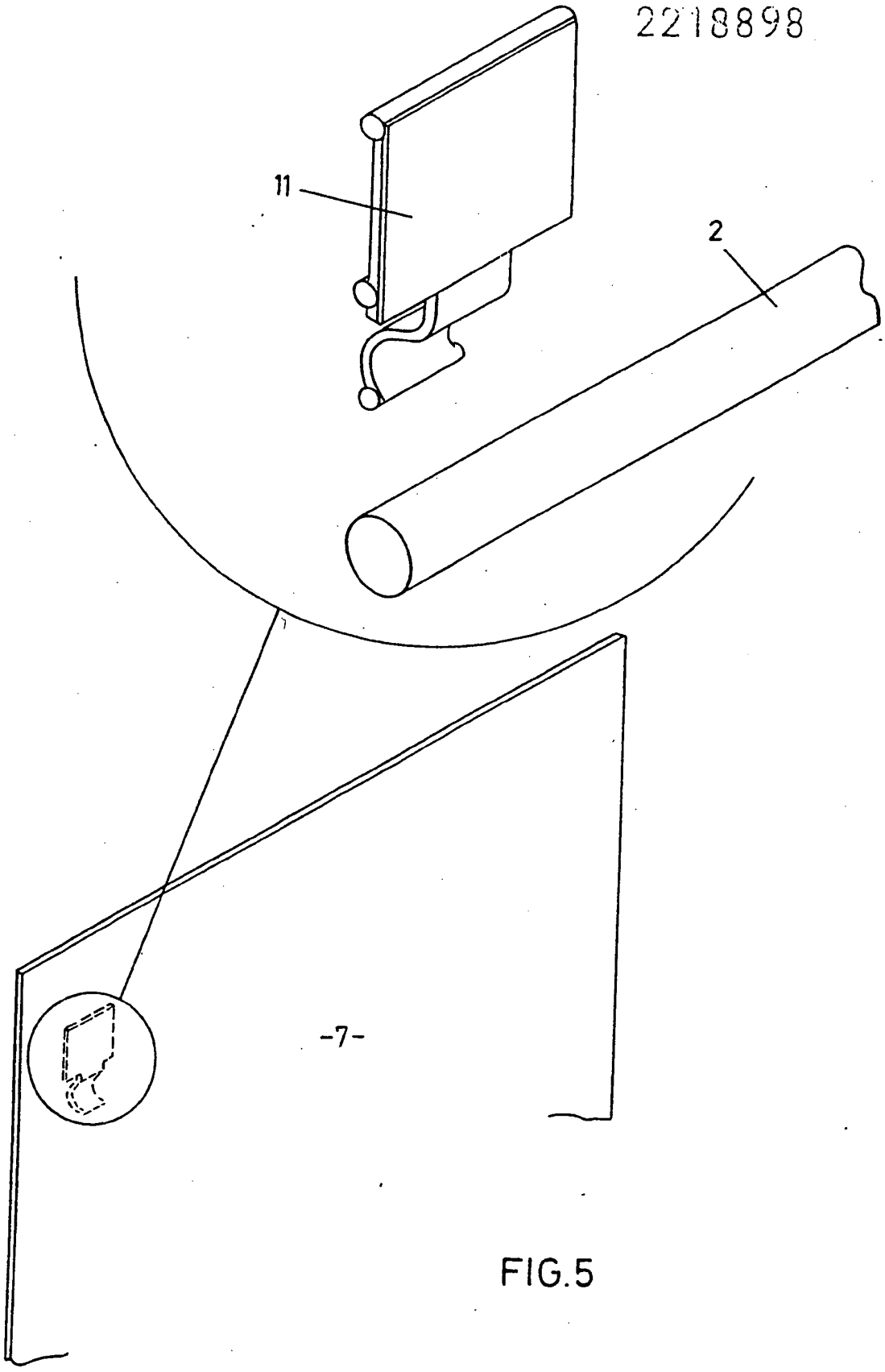

FIG.5

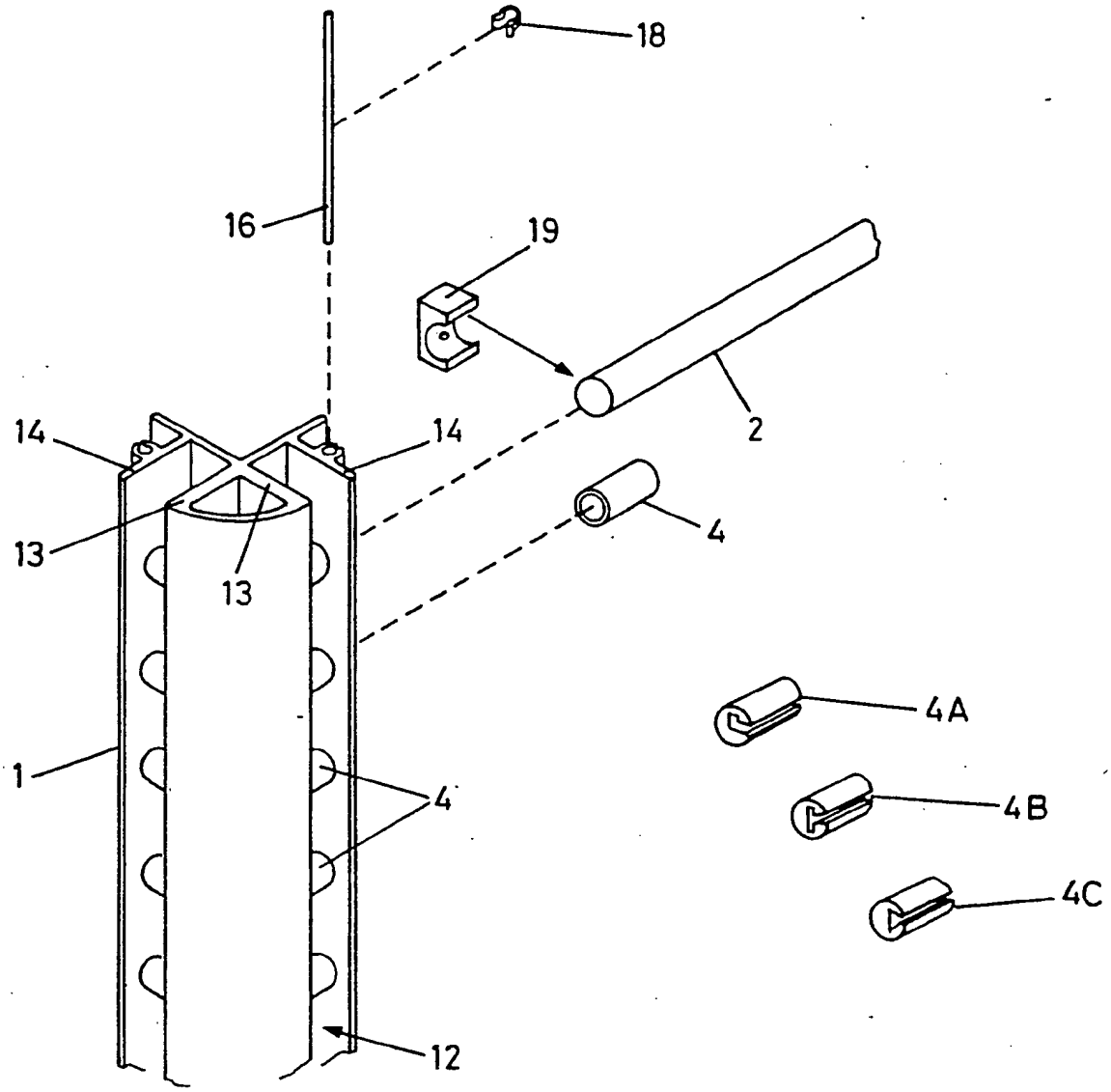

FIG. 6

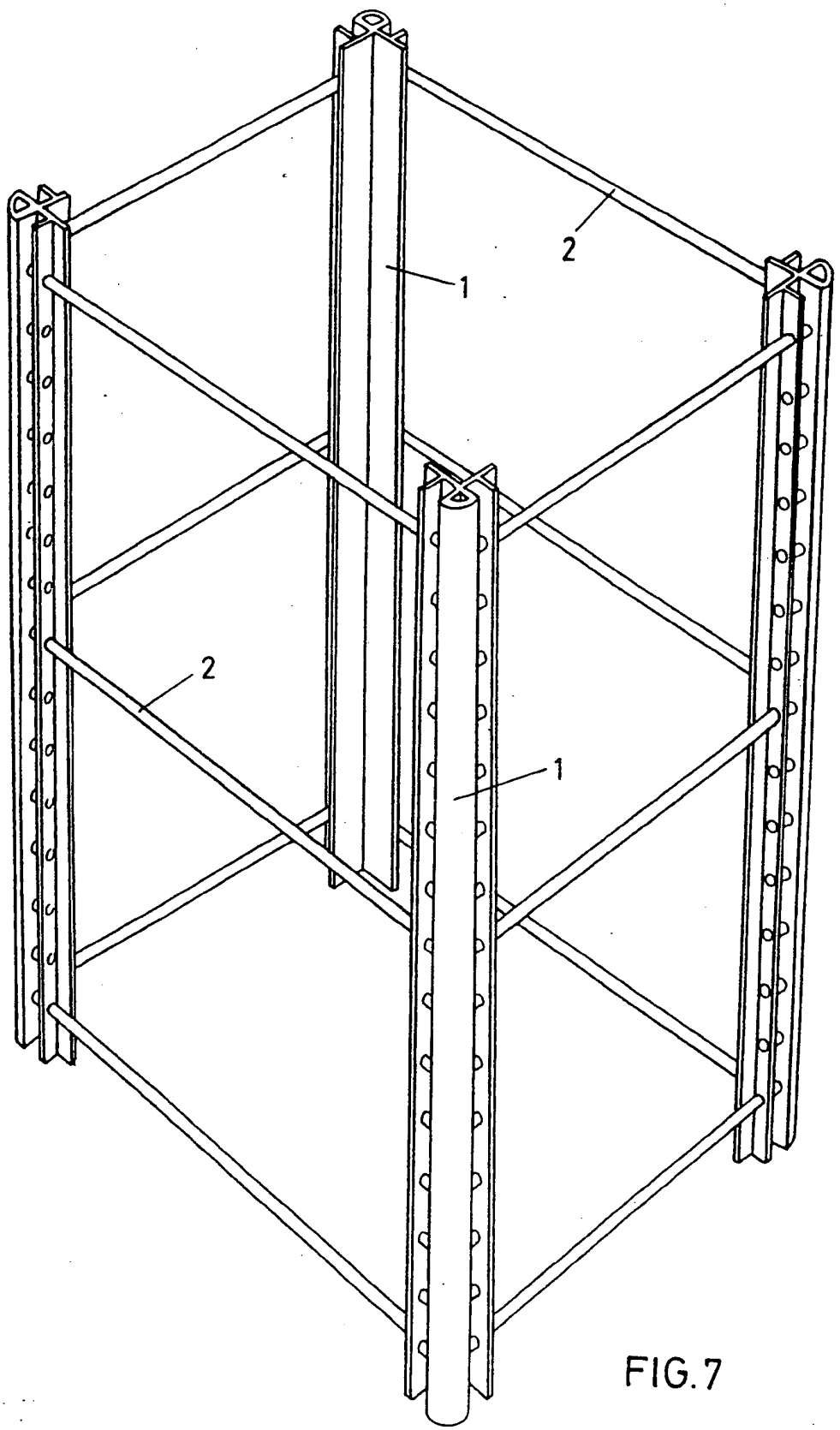

FIG.7

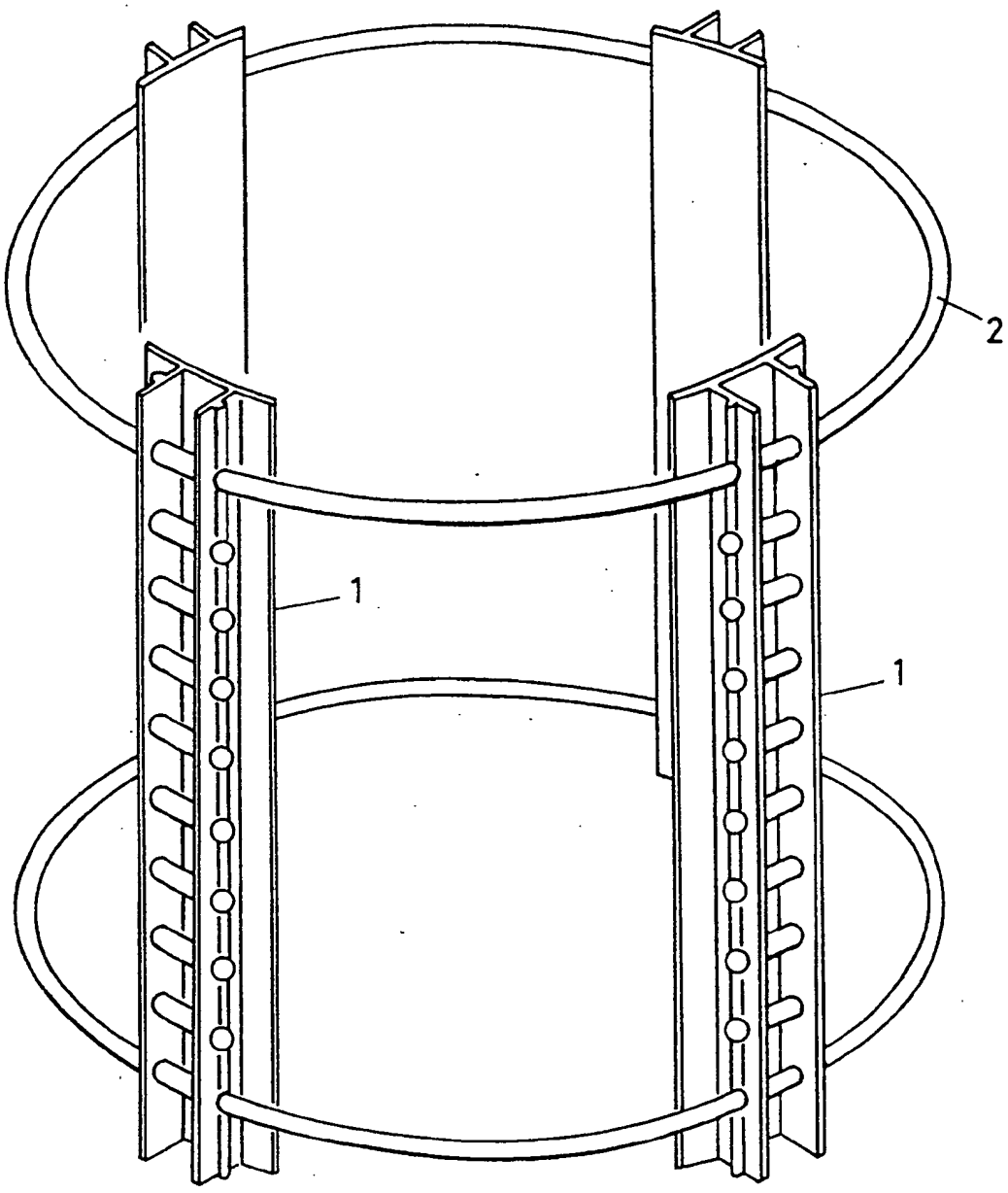

FIG. 8

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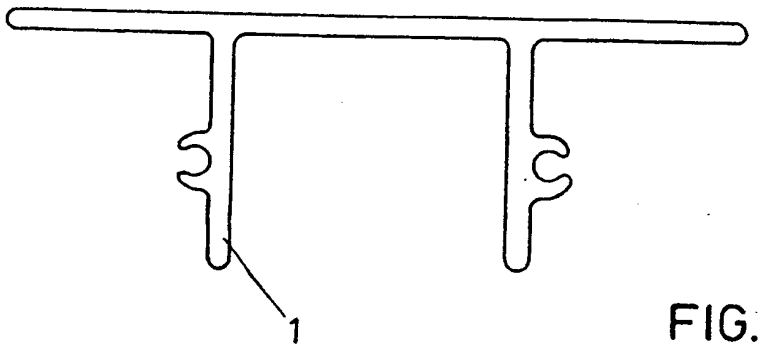

FIG. 9A

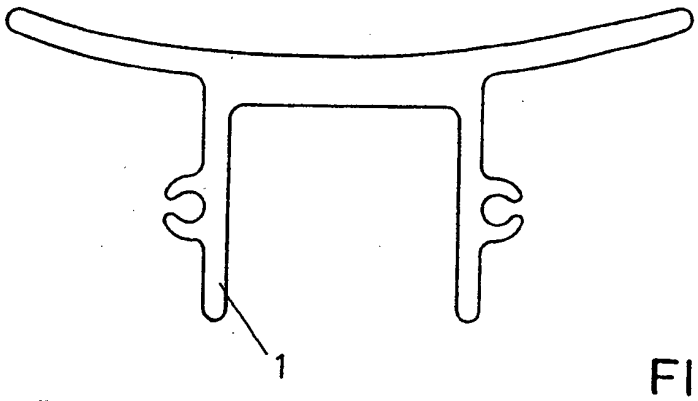

FIG. 9B

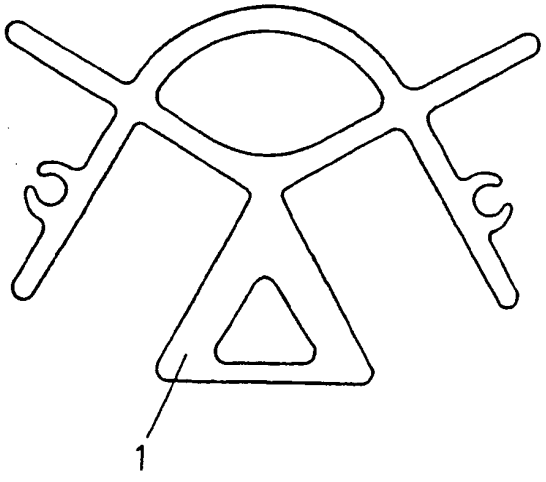

FIG. 9C

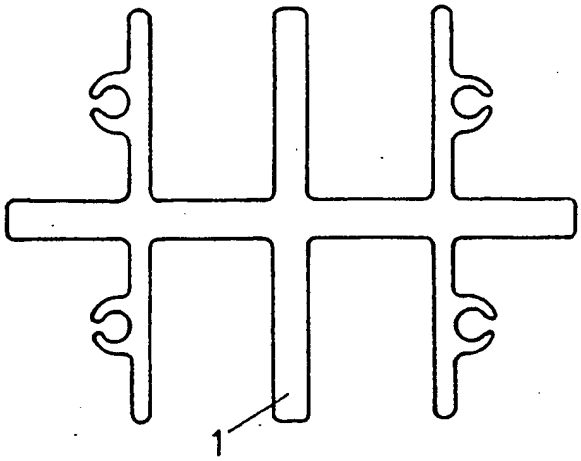

FIG. 9D

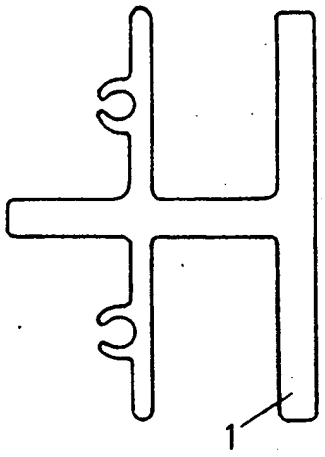

FIG. 9E

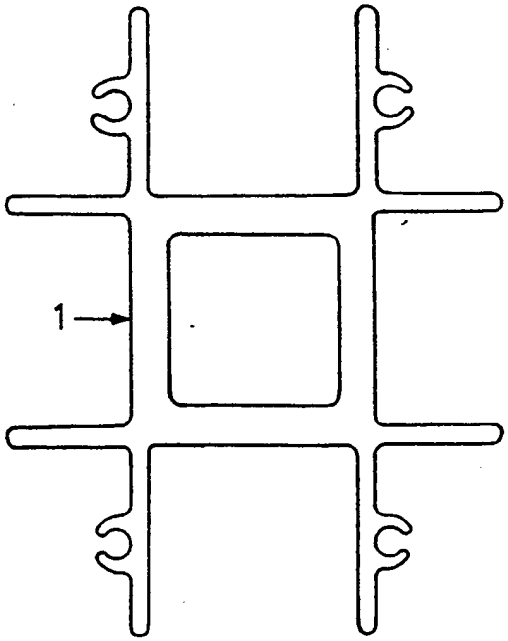

FIG. 9F

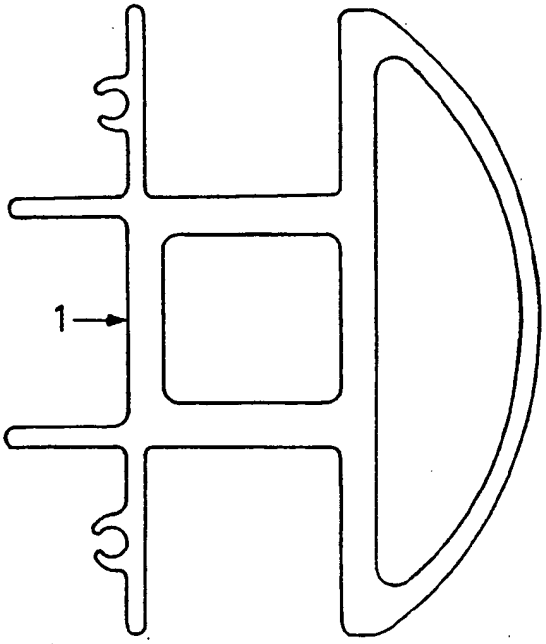

FIG. 9G

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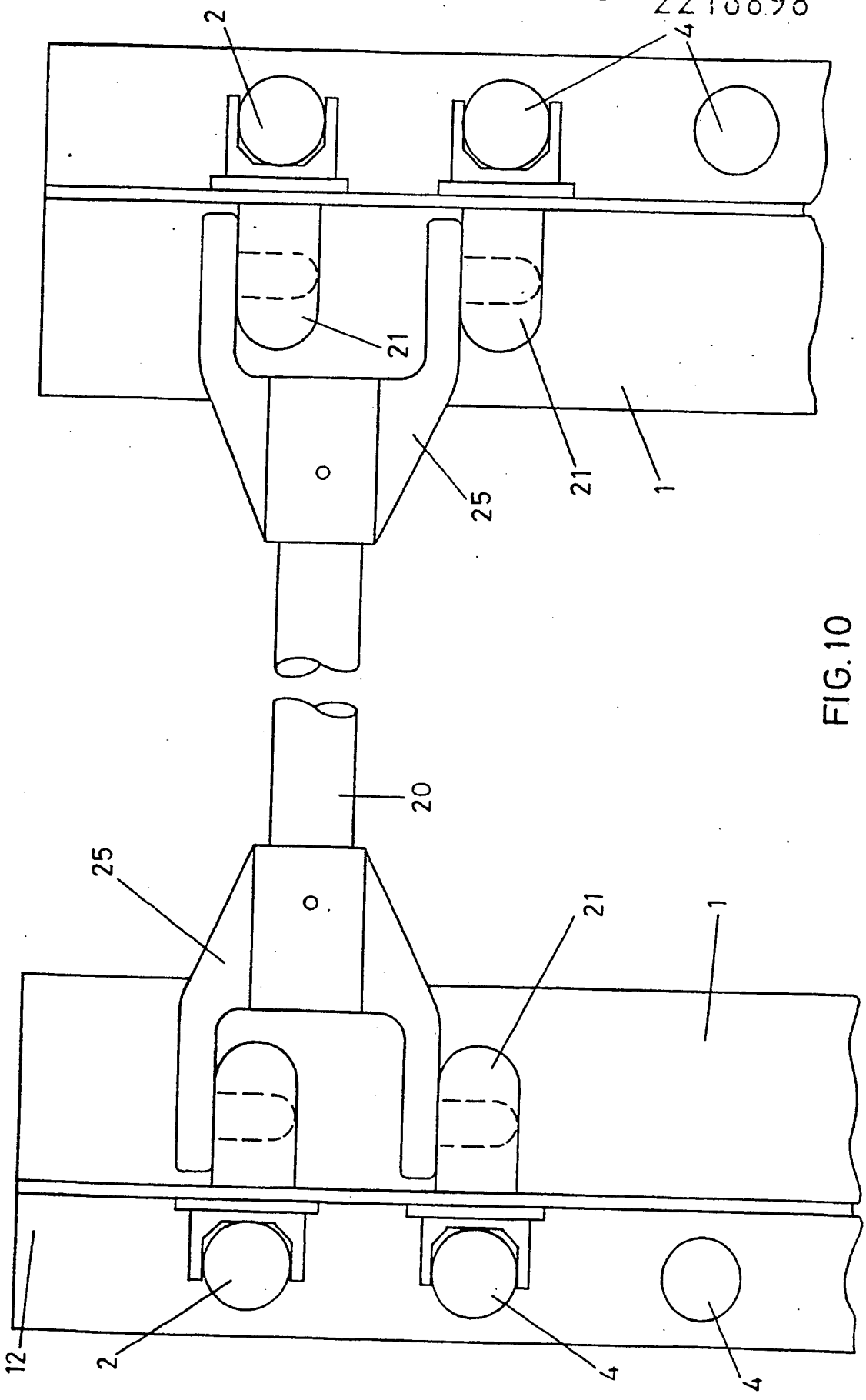

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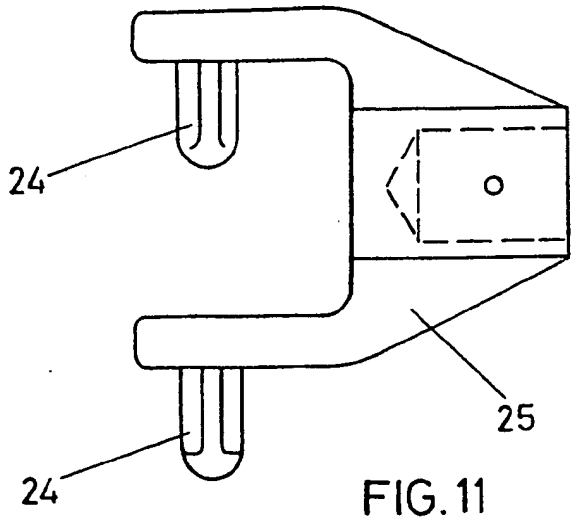

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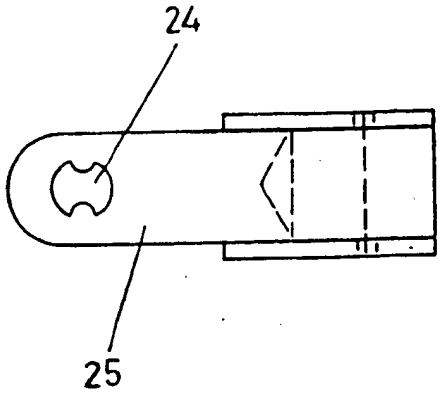

FIG. 12

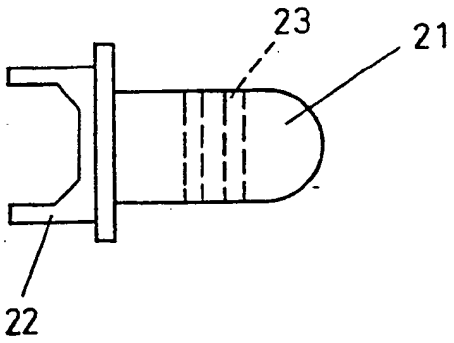

FIG. 13

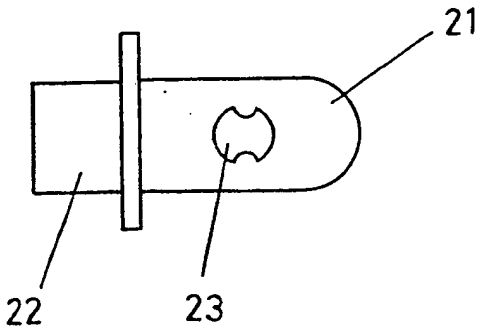

FIG. 14

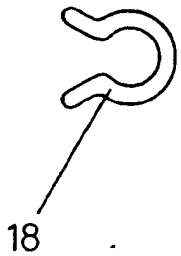

FIG. 15

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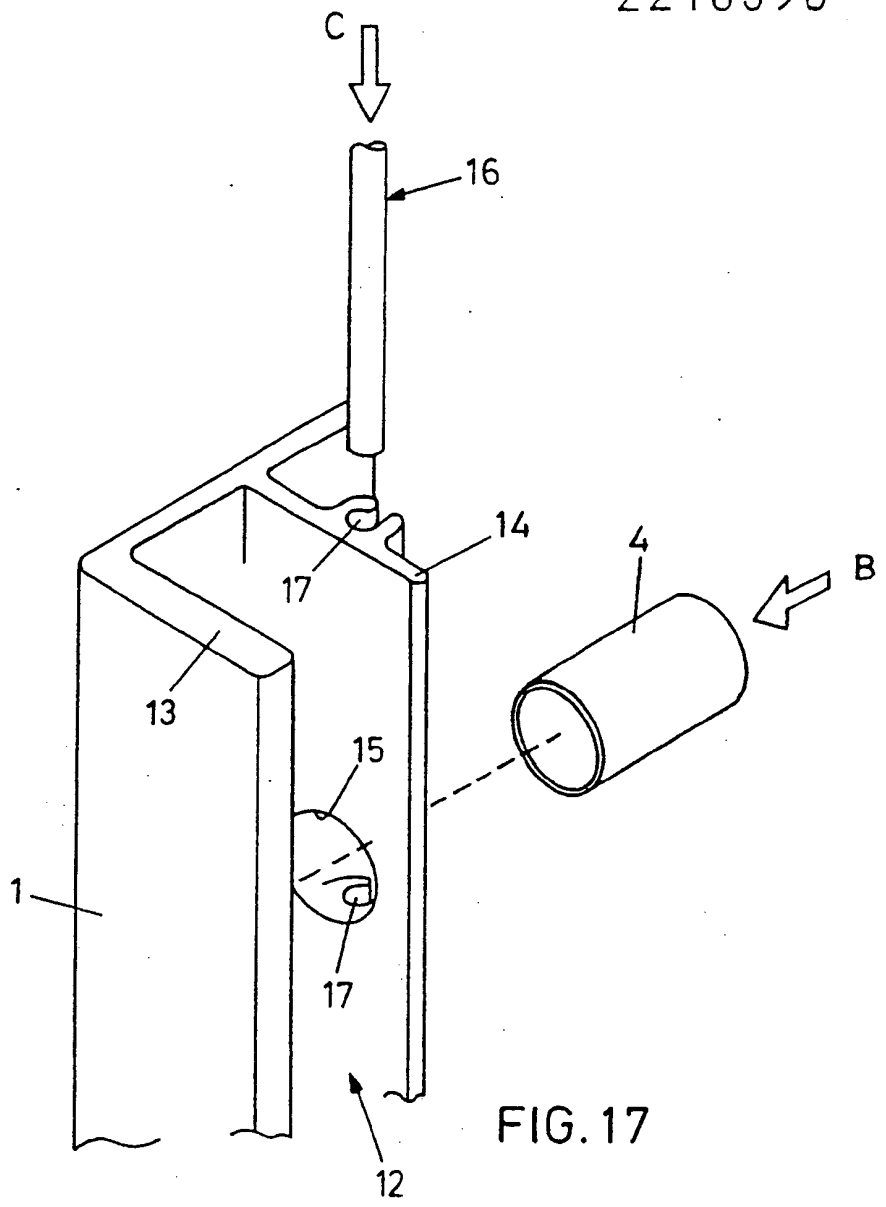

FIG. 17

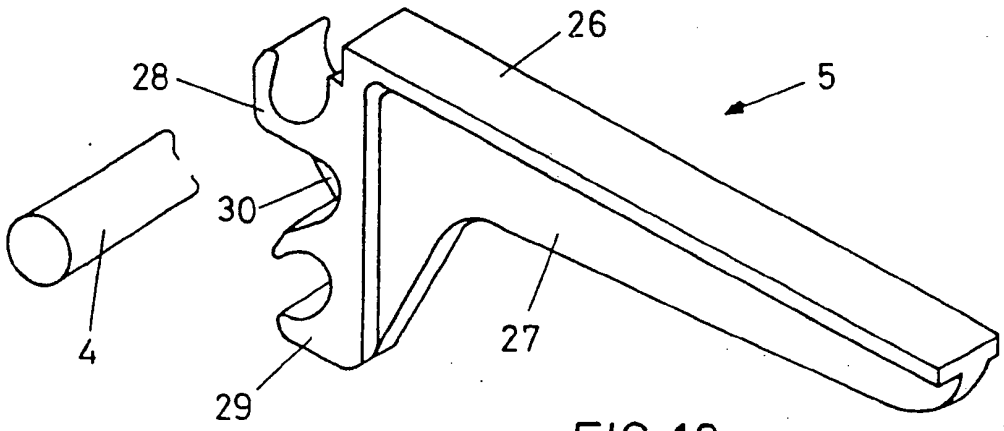

FIG. 18

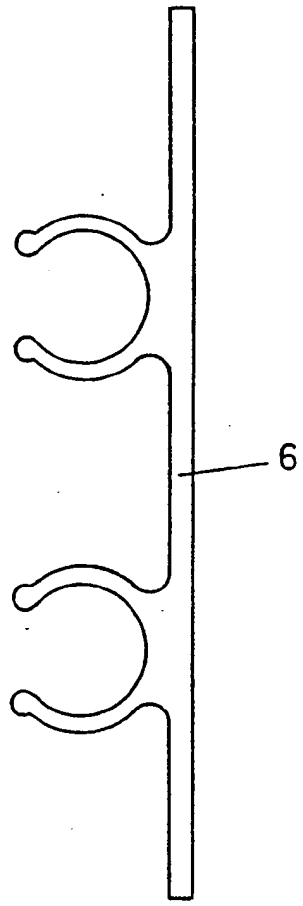

FIG. 16

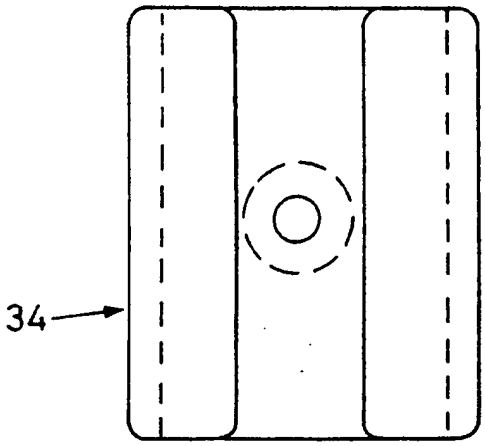

FIG. 21

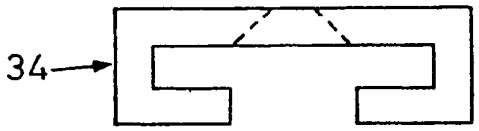

FIG. 22

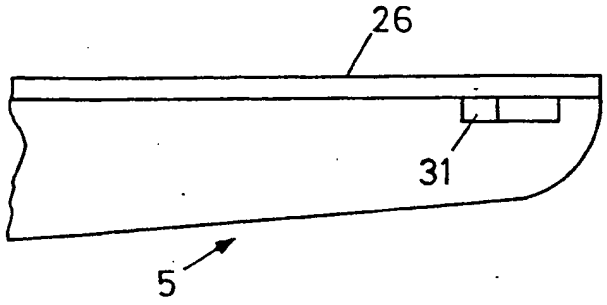

FIG. 19

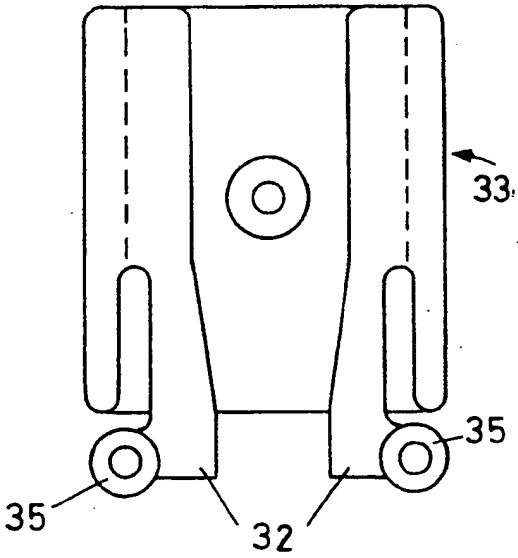

FIG. 23

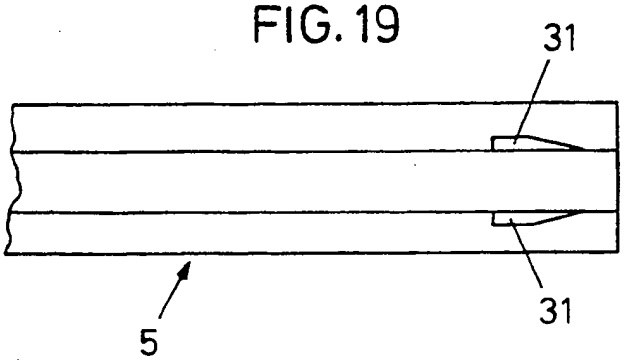

FIG. 20

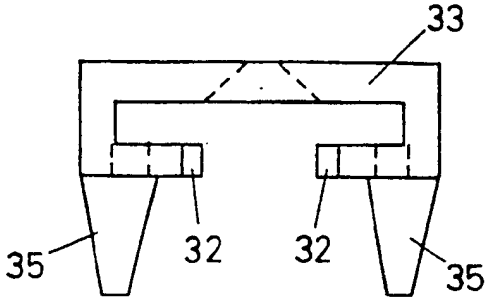

FIG. 24

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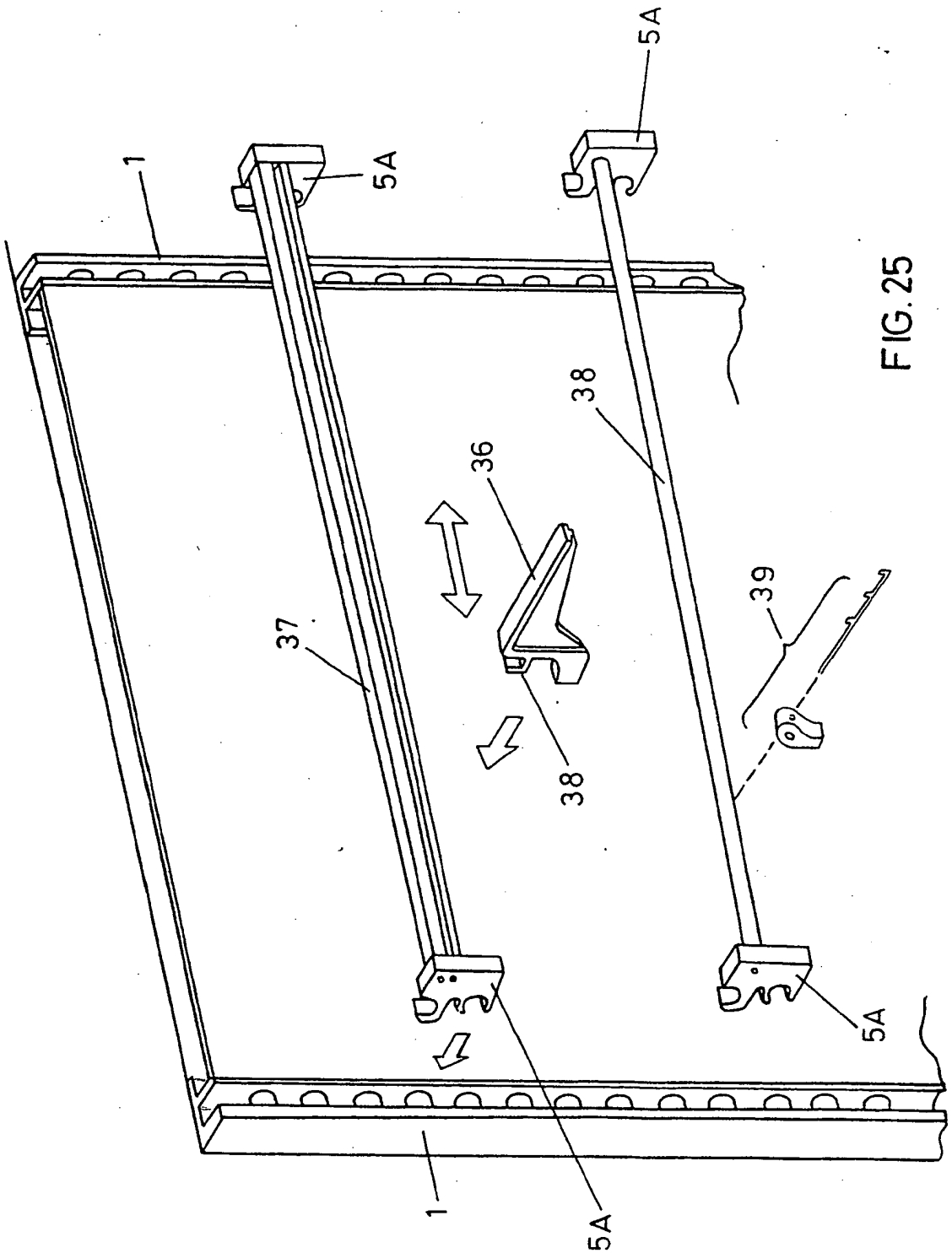

FIG.25

TITLE:

Shop Fitting Structure and System

DESCRIPTION:

Field of the Invention

The invention relates to shop fitting structures and systems suitable for supporting shelves and other merchandise displays in retail stores.

Background Art

Shopfittings fall into two main classes or types. On the one hand there are floor-mounted units that can be used to provide shelf or hanging displays centrally of a large retail area. On the other hand there are wall-mounted units which are intended to support and display goods on the walls of the building. There are many different designs of floor and wall shopfitting display systems, and many have the common objective of providing a variable display so that the user can reposition shelves at will as the product display changes.

One currently popular design of wall display system, known as a slatted wall system, comprises an array of structural panels which are secured to the walls. Each panel has recessed therein a series of horizontal support rails at regular vertical spacings of about 100 mm, and

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shelves, garment support rails or other merchandise display devices can be supported at any horizontal location in any of the vertically spaced recessed rails.

Although popular, the slatted wall system has severe limitations. The panels are conventionally made in a unit size of 2400 mm x 1200 mm, and because the panels themselves are structural members which support the shelving, it will be appreciated that they can be very heavy and cumbersome to handle. The structural strength in each panel must be sufficient to support a series of shelves each of a depth of 300 mm or more and capable of supporting very substantial weights such as a full stack of tin cans in a supermarket, or similar stacks of weight lifting weights in a sports shop. The durability of the panels has been increased by using aluminium extrusions to define the recessed rails, but this has inevitably increased the unit cost. The greatest contribution to the unit cost of this system is, however, the cost of transport to the site and the actual fitting of the system itself which generally requires the services of at least two skilled fitters at any one time. Once the system is in position it is extremely difficult to relocate it or even salvage it for re-use. Because of the nature of the construction and floor levels of existing buildings it is extremely difficult to achieve straight lines over wide expanses using the slatted system. Further difficulties are encountered in areas where internal and external corners are required, or around doorways or when cladding columns internally of the buildings.

The slatted wall system is inevitably offered in only a limited range of finishes, since the finish applied must endeavour to conceal or reduce the emphasis on the slatted appearance provided by the horizontal recessed rails. Any finish, such as a spray finish or a laminate, which is applied in the factory generally has a short lifetime at

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the retail outlet since any regular changing of the positions of the shelves supported by the system generally results in damage to the surface of the panel. Inevitably, therefore, the slatted wall panels are offered in neutral plain colours and when damaged in the retail store are simply repainted on the site.

If the slatted wall system is to be used for free standing displays rather than wall displays, then it must be provided with a rigid weight-supporting structure to which it can be secured.

Summary of the Invention

It is the object of the invention to provide a more flexible shop fitting structure and system that is capable of use either as a floor system or as a wall system, and which avoids many or all of the disadvantages discussed above in relation to slatted wall systems.

The invention provides a shopfitting structure comprising a vertical channel member mounting, between opposite sides thereof, a vertical array of identical equally spaced transverse load-bearing elements; and at least one support bracket for shelving or merchandise, securable to a pair of the transverse load-bearing elements by a pair of integrally formed mounting portions of the bracket, each mounting portion being formed resiliently to clip partially around its associated transverse load-bearing element or into a shaped longitudinal groove in its associated transverse load-bearing element.

The support brackets are an important element of the invention. They may be L-shaped brackets for supporting shelves typically of up to 450 mm width, or they may support any other merchandise display unit such as a hanging rail for clothing. The manner in which merchandise is displayed from the support bracket is not particularly important. What is important to the

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invention is the mounting of the support bracket on the load-bearing elements of the vertical channel member. If those load-bearing elements are circular in vertical section, then the mounting portions of the bracket are preferably shaped to clip resiliently around slightly more than half the circumference of the load-bearing elements. Clearly the simplest design would be to have the two mounting portions formed as generally C-shaped hooks each opening downwardly to clip around the front top and rear of the associated load-bearing elements. It is, however, preferred to have the lower one of the mounting portions of the bracket shaped to clip around the top, front and bottom of the associated load-bearing element. The upper one of the mounting portions is preferably shaped to clip around the front, bottom and rear of the associated load-bearing element. In this way the internal stresses in the bracket are so distributed that the bracket can be injection moulded from, for example, polystyrene with or without internal reinforcement. The weight loadings of such brackets can be in excess of 100 kilos.

The flexibility of the system of the invention wil be appreciated when it is pointed out that instead of the brackets having mounting portions which clip resiliently around slightly more than half the circumference of the load-bearing elements, they may clip into a shaped longitudinal groove in the associated transverse load-bearing element. This enables the system of the invention to accept either the purpose-designed mounting bracket described above or any of the mounting brackets currently available for slatted shelving systems.

Preferably shelves are supported by the brackets by means of injection moulded shelf clips which require that the shelf be slid into position longitudinally along the projecting part of the bracket, and there held in place by an injection moulded latch portion of the clip.

The versatility of the structure of the invention is considerable. A complete linear, curved or angled shelving system can be built up by providing a plurality of the vertical channel members held in spaced apart relationship by transverse tie bars. If the system is to be used as a wall system, then it may conveniently be supported on a wall by wall hooks supporting those tie bars. If the system is to be a floor system, then the channel members may be formed as corner channel members with two similar vertical arrays of identical equally

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spaced transverse load-bearing elements in two channels inclined at an angle one to the other. For example, to achieve a 90° external corner, the vertical channel member would have two vertical channels each containing its own vertical array of identical equally spaced transverse load-bearing elements, the two channels being arranged at 90° one to the other. The angle between the two channels would conveniently be filled by an integrally formed web of the channel member, which web would add to the structural strength of the channel member.

A floor system can be provided by placing two wall arrays back to back, and connecting them together by means of spacer bars.

The gaps between the adjacent vertical channel members are preferably filled by decorative filler panels provided on their reverse with clip members shaped to pass over and behind the tie bars to mount the filler panels on the tie bars. The filler panels are not load-bearing, and may therefore be made of relatively lightweight material such as hardboard. Moreover the filler panels themselves contain no fittings for mounting the brackets, and so may be decorated or printed to provide a factory-finished decor for the retail outlet.

Electrical connections can be provided extremely easily behind the filler panels, supported by the tie bars. The same tie bars or additional tie bars may also be used to support skirtings or pelmets to provide a more pleasing finish to the structure.

DRAWINGS:

Figure 1 is a perspective view of part of a shop fitting structure according to the invention, in partially exploded form;

Figure 2 is a schematic perspective view showing how a shop fitting structure according to this invention can be

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arranged to go around internal and external corners;

Figure 3 is an illustration of the mounting of a filler panel, pelmet and skirting on a structure according to Figure 1;

Figure 4 is a vertical cross section through the pelmet and skirting mountings of Figure 3;

Figure 5 is a detail showing the method of mounting the filler panel of Figure 3;

Figure 6 is an exploded perspective view illustrating a preferred construction of a vertical column of a structure according to the invention, in this case a corner column;

Figure 7 is a perspective view of a free standing shop fitting structure according to the invention incorporating four of the corner columns of Figure 6;

Figure 8 is a perspective view of an alternative free standing shop fitting structure according to the invention;

Figures 9A to 9G are sections through a variety of alternative channel members for use in the construction of shop fitting structures according to this invention;

Figure 10 is a vertical section through two vertical channel members of a shop fitting structure according to this invention, held in back-to-back relationship by a spacer bar;

Figures 11 to 14 are details of the mounting components of the spacer bar of Figure 10;

Figure 15 is a plan view of a spring clip element as shown in Figure 6;

Figure 16 is a vertical section through a filler strip as illustrated in Figure 1;

Figure 17 illustrates a preferred method of mounting the load-bearing elements in the vertical channel member of a structure according to the invention;

Figure 18 is a detailed perspective view of a shelf--support bracket for use in a structure according to the invention;

Figures 19 and 20 are, respectively, a side elevation and

a plan view from below of a distal end portion of the bracket of Figure 18;

Figures 21 and 22 are respectively a plan view from below and an end elevation of a shelf retaining clip for use with the bracket of Figures 18 to 20;

Figures 23 and 24 are respectively a plan view from below and an end elevation of another shelf retaining clip for use with the bracket of Figures 18 to 20, this shelf retaining clip being designed to cooperate with the latching structure provided at the distal end of the bracket; and

Figure 25 is an exploded perspective view of a shop fitting structure according to this invention, illustrating the use of two support brackets to support a horizontal shelf support rail for acceptance of conventional slatted shelving brackets, or a garment--hanging rail.

Referring first to Figure 1, the shop fitting structure illustrated comprises two vertical channel members 1 spaced apart by a pair of tie bars 2. A wall hook 3 is illustrated, provided the means by which the structure can be suspended on a wall of a building. In practice, a number of such wall hooks 3 would be provided, to spread the load of the structure over a number of fixing points.

Within the vertical channel members 1 are vertical arrays of identical equally spaced transverse load-bearing elements 4. The detail of the mounting of those load--bearing elements 4 within the channel member 1, indicated generally as A in Figure 1, is discussed in greater detail below with reference to Figurs 6 and 17.

A shelf support bracket 5 is provided, to clip onto a pair of the transverse load-bearing elements 4 in a manner to be described below with reference to Figure 18. The bracket 5 need not necessarily clip onto adjacent ones of the load-bearing elements 4: it could if desired

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be formed so as to clip onto any pair of the load--bearing elements separated by one or more intervening load-bearing elements.

A filler strip 6, illustrated in more detail in Figure 16, is provided to clip onto pairs of the load-bearing elements 4, so as to provide an optional masking of the interior of the channel member 1 above or below the or each shelf support bracket 5.

Figure 2 illustrates how the spaces between the vertical channel members 1 can be filled by filler panels 7, and also how the vertical channel members 1 can be provided with two channels formed therein, to form internal or external corners. Different sectional shapes for the channel members are shown in Figures 9A to 9G, although it will be appreciated that these examples are not exhaustive and that other shapes are possible, to build up differently shaped shop fitting structures.

In addition to the filler panel 7, there may be provided between adjacent vertical channel members 1 a pelmet board 8 and/or a skirting 9 as illustrated in Figure 3. The pelmet and skirting can conveniently be supported by additional tie bars 2 as illustrated in Figure 3. Figure 4 shows the method of securement to those tie bars by means of moulded clips 10 which are conveniently fastened to the reverse of the pelmet and skirting by adhesive.

Figure 5 illustrates how a similar array of moulded clips 11 (one only being shown) is used to secure the filler panel 7 removably to the tie bars 2. Each clip 11 is preferably injection moulded from plastics material, and secured to the reverse of the filler panel 7 by means of adhesive. This makes the filler panels particularly easy to remove, and provides great opportunites for shop designers. Pre-finished panels can be prepared in the factory, and shipped directly to the retail store either with or without the mounting clips 11 in place. There

they can be rapidly clipped into position over the tie bars 2, the fitting being an unskilled operation that is completed very rapidly. The entire decor of the retail outlet can be changed very rapidly and without the lingering smell of paint, so that the time during which the public is excluded from the store is reduced to an absolute minimum. Furthermore transport costs are low, as the filler panels 7 are lightweight and thin (typically no more than 6 mm) so that a large number can be transported in one van. If necessary, the same van can be used to return filler panels from a previous decor, which can if necessary be re-covered in the factory for re-use.

Although not illustrated, the mounting clips 11 can advantageously be moulded in two pieces. A first piece is relatively flat, and is secured to the back of the filler panel 7 by adhesive in the factory before transportation to the erection site of the retail store. Because the first piece is relatively flat, the panels can be flat-packed in the transport van. A second piece of each two-piece mounting clip 11 is shaped to clip or lock onto the first piece, and it is the second piece that in use clips over the tie bar to retain the filler panel 7 in position. In use, the second pieces of the mounting clips 11 are not fitted until immediately before the panels 7 are fitted. Preferably the second pieces of the mounting clips can be removed, after the panel 7 has been removed so that the panel 7 has been removed, so that the panels 7 can again be flat-packed for storage or transportation back to the factory.

Figures 6 and 17 illustrate a preferred method of securing the load-bearing elements 4 in the channels 1. In each case the vertical channel member 1 presents an outwardly facing channel 12 to the shop interior. That channel 12 is provided by two side walls 13 and 14, of which the side wall 13 is preferably made of thicker material. A vertical array of transverse bores 15 is provided through the side wall 14 and partially through

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the side wall 13. These bores receive short cut lengths of tubular steel stock which provide the load-bearing elements 4. The load-bearing elements 4 are inserted in the direction of the arrow B of Figure 17, and are retained in position by means of a dowel rod 16 which is inserted vertically down a retaining groove 17 formed in the wall 14 in the direction of the arrow C of Figure 17. The dowel rod 16 spans the various load-bearing elements 4 to keep them captive in the vertical channel 12. The dowel rod 16 is ultimately in use retained in the groove 17 by means of upper and lower tie bars 2 (see for Example Figure 6) but as a means for temporary retention during transport and erection there is provided a spring retaining clip 18, as illustrated in Figure 6, which simply encircles the dowel rod 16 at one or more locations where the rod 16 spans the load-bearing elements 4. The clip 18 is illustrated in greater detail in Figure 15.

The load-bearing elements 4 do not necessarily have to be made from tubular steel stock as illustrated. They may be made from steel or aluminium bar stock, and if desired may have a profiled longitudinal channel formed therein as illustrated in Figure 6 where alternative load-bearing elements 4 are referenced 4A, 4B and 4C. These alternative load-bearing elements will accept any of the conventionally shaped brackets currently used in slatted wall systems in addition to the brackets 5 of Figure 1 which are specifically designed for the shopfitting system of the invention. One example of a conventional slatted shelving bracket is illustrated at 36 in Figure 25, and would fit into the load-bearing elements 4A of Figure 6.

Figure 6 also illustrates a preferred method of securing the tie bars 2 from the back of the channel members 1. The topmost load-bearing element 4 is omitted from the vertical array of bores 15, and on site the end of a

similarly sized tie bar 2 is placed in that empty bore. An injection moulded plastics filler 19 is placed behind the tie bar 2 in the vertical channel 12, and the tie bar is made fast by a fixing screw (not shown) passing through the rear wall of the channel 12, the filler 19 and into a bore of the tie bar 2.

Figures 7 and 8 illustrate how free standing columns can be constructed according to the invention. These columns can be constructed on site by fitting together the appropriate combinations of columns 1 and tie bars 2, and the structure is therefore equally useful for totally free standing assemblies and for the creation of cladding and shelf support structures around internal pillars of retail premises. Clearly Figures 7 and 8 illustrate only two possible examples of an infinite range of shapes of structure that can be constructed according to this invention. Some further indication of the design possibilities available will be appreciated from the different sections shown in Figures 9A to 9G, of which Figures 9A to 9C illustrate the shapes of extruded section of channel members that would be needed to provide a wall display system for, respectively, a flat wall, a convex curved wall and a convex angular wall. Figures 9D and 9E illustrate sections that might be suitable for exhibition halls, when the display structure has to have two faces arranged back to back with a minimum of intervening width. Figure 9F and 9G illustrate a similar arrangement in which the structure is provided with an inbuilt width greater than the minimum of Figures 9D and 9E. It will be noted that in the embodiments of 9D and 9F, the

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individual load-bearing elements (not shown) would be retained in transverse bores through the side walls of the different channels, each by two dowel rods (not shown) rather than by the cooperation between one dowel rod and a blind end to the locating bore as described above in relation to Figures 6 and 17. All of the section shapes illustrated could be manufactured quite easily from extruded aluminium.

Figures 10 to 14 illustrate the mounting of a spacer bar 20 to maintain a constant accurate spacing between different spaced rows of channel members 1. Within the channel 12, and behind a pair of load-bearing elements 4 or tie bars 2 are provided injection moulded fixing elements 21. Each fixing element 21 has a location portion 22 received internally of the channel 12 as a snug fit around the associated load-bearing element 4 or tie bar end 2. The remainder of the fixing element 21 extends through a bore formed in the rear wall of the channel 12, to present a vertical key slot 23 to a peg portion 24 of a mounting fitting 25. In use, two fixing elements 21 are provided around adjacent load-bearing elements 4 or tie bars 2 as illustrated in Figure 10, and each mounting fitting 25 will be provided with a bifurcate end portion having two axially aligned peg portions 24 as illustrated in Figure 11. The peg portions 24 and key slots 23 are shaped other than circular, to resist pivotal movement of the spacer bars 20 around the common axis of the key slots 23.

Figures 18 to 24 illustrate a preferred construction of shelf support bracket 5. The bracket 5 is injection moulded from polystyrene, and has a shelf support surface 26 supported by an integrally moulded web 27. A rear portion of the bracket 5 fits inside the channel 12 of the channel member 1, and is provided with two moulded mounting portions each formed to clip resiliently around

slightly more than half of the circumference of the associated load-bearing element 4. The upper mounting portion 28 is formed to engage the front, bottom and rear of the associated load-bearing element 4, and the bottom mounting portion 29 is formed to engage the top, front and bottom of the associated load-bearing element 4. Thus to secure the bracket 5 in position, it is first raised to a position approaching the vertical and then pushed onto the appropriate upper load-bearing element with the open portion of the upper mounting portion 28 leading. The bracket is then rotated pivotally around the axis of the upper load-bearing element 4, until the lower mounting portion clips around the appropriate lower load-bearing element. This two-component movement of the bracket into position (and the corresponding two-component movement to remove it) makes the fitting particularly resistant to inadvertent disclocation in use.

A reinforcing web 30 is provided to strength the underside of the upper mounting portion 28 of the bracket 5.

The distal end of the bracket is shaped as shown in Figures 19 and 20. Beneath the shelf bearing surface 26 there is provided a pair of detent protrusions 31. These cooperate with a pair of resiliently sprung latch members 32 of an injection moulded shelf clip 33 as illustrated in Figures 23 and 24. The shelf clip 33 is one of a pair that is secured to the underside of a shelf to be supported on the bracket 5, the other shelf clip of the pair being illustrated in Figures 21 and 22 as 34. A similar pair of shelf clips 33 and 34 will be provided for each bracket position along the length of the shelf. The shelf clips 34 are provided at the rear of the shelf, and slide completely over the surface 26 of the bracket 5 until they reach the proximal end of the bracket. The shelf clips 33 are provided near the front of the shelf, and slide over only the distal portion of the bracket until the resilient latch portions 32 pass beyond the

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moulded detents 31 there to spring inwardly to retain the shelf on the bracket.

Shelf removal can be achieved by means of a suitable tool which engages two gripping portions 35 of the moulded detent members 32 to move them apart.

Clearly a wide variety of designs of shelf support brackets is available. For example, the shelves may be required to be downwardly inclined, in which case the support surface 26 would be moulded at an appropriate angle. The brackets might be required to support glass shelves, in which case they might be provided with resilient fee for cushioning of the shelf. The brackets might support not a shelf but a rail for merchandise display, for example a hanging rail for garments. Such a rail may be designed permanently to occupy a plane perpendicular to the plane of the shop fitting structure, or it may be pivotable about a vertical axis, to enable the goods displayed to be moved from side to side. All such variations will, however, be readily apparent to any designer of shop interiors.

A considerable range of brackets is already available for slatted wall systems. Figure 25 shows how such brackets, 36, can be used in conjunction with the shop fitting structure of the invention. A pair of brackets 5A of a shop fitting system according to this invention mount between them a slatted shelving support rail 37. That rail 37 can thus be positioned at any desired height over the full range of the channel members 1. The bracket 36 from the slatted shelving support system is then fitted with its rearwardly extending tail 38 located in the correspondingly shaped slot in the slatted shelving support rail 37, where it can be positioned anywhere along the length of the rail 37.

It will be understood that instead of the L-shaped tail 38 illustrated in Figure 25, the bracket 36 could equally have a T-shaped or dovetail-shaped tail, for location in a correspondingly shaped slot in the slatted shelving support rail 37. Typically any such bracket would be located in its slot before mounting the rail 37 between the two brackets 5A.

Figure 25 also illustrates how a hanging rail 38 can be supported between a similar pair of brackets 5A. The rail 38 may be any convenient section as an alternative to the circular section shown, and if desired can support one or more merchandise display and support fittings such as the prong display 39 illustrated. Such fittings can be positioned anywhere along the length of the rail 38.

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CLAIMS

1. A shopfitting structure comprising a vertical channel member mounting, between opposite sides thereof, a vertical array of identical equally spaced transverse load-bearing elements; and at least one support bracket for shelving or merchandise, securable to a pair of the transverse load-bearing elements by a pair of integrally formed mounting portions of the bracket, each mounting portion being formed resiliently to clip partially around its associated transverse load-bearing element or into a shaped longitudinal groove in its associated transverse load-bearing elements.

2. A structure according to claim 1, wherein the load-bearing elements are circular in vertical section and the mounting portions of the bracket are shaped to clip around marginally more than half the circumference of the load-bearing elements.

3. A structure according to claim 2, wherein a lower one of the mounting portions of the bracket is shaped to clip around the top, front and bottom of the associated load-bearing element.

4. A structure according to claim 2 or claim 3, wherein an upper one of the mounting portions of the bracket is shaped to clip around the front, bottom and rear of the associated load-bearing element.

5. A structure according to any preceding claim, wherein the vertical channel member is formed from extruded aluminium section.

6. A structure according to claim 5, wherein the transverse load-bearing elements are discrete lengths of tubular metal stock retained in transverse bores formed in the side walls of the vertical channel member.

7. A structure according to claim 6, wherein the load-bearing elements are retained in their transverse

bores by one or more dowel rods received in vertical channels in one or both side walls of the vertical channel member, each dowel rod spanning the ends of the load--bearing elements in the array.

8. A structure according to claim 7, further comprising spring clips passing around the dowel rod or rods to restrain the dowel rod or rods against axial movement in the vertical channels during transport and assembly.

9. A structure according to any preceding claim, wherein a plurality of the vertical channel members are held in spaced apart relationship by transverse tie bars.

10. A structure according to claim 9, further comprising means for supporting the vertical channel members on a wall, comprising wall hooks shaped to support the tie bars.

11. A structure according to claim 9 or claim 10, further comprising filler panels mountable on the tie bars to fill the space between adjacent vertical channel members.

12. A structure according to claim 11, wherein the filler panels are provided on their reverse with clip members shaped to pass over and behind the tie bars to mount the panels on the tie bars.

13. A structure according to any preceding claim, further comprising one or more filler strips mountable in the or each vertical channel member to conceal any of the transverse load-bearing elements which are not used to support brackets.

14. A shopfitting system susbtantially as described herein with reference to the drawings.

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